

Jaynes: breaking down consciousness

Consciousness is a much smaller part of our mental life than we are conscious of, because we cannot be conscious of what we are not conscious of. How simple that is to say; how difficult to appreciate! It is like asking a flashlight in a dark room to search around for something that does not have any light shining upon it. The flashlight, since there is light in whatever direction it turns, would have to conclude that there is light everywhere. And so consciousness can seem to pervade all mentality when actually it does not.

— Jaynes, *The Origins of Consciousness in the Breakdown of the Bicameral Mind*, Houghton Mifflin, 1976, p. 23.

In 1976 Julian Jaynes published his controversial book *The Origins of Consciousness in the Breakdown of the Bicameral Mind*, introducing the hypothesis of a two-chambered brain-mind model that preceded the evolutionary development of the conscious mind.

Jaynes' speculative model gave rise to a huge debate, which has reverberated throughout the current neuroscientific and neurophilosophical literature. Has the bicameral mind stood the test of time?...

— Andrea Eugenio Cavanna, Michael Trimble, Federico Cinti, and Francesco Monaco. "The 'bicameral mind' 30 years on: a critical reappraisal of Julian Jaynes' hypothesis," [*Functional Neurology*](#) 2007 Jan-Apr; 22 (1): 11-5.

It is striking that Jaynes' 1976 conception of J-consciousness is compatible with contemporary research on human cognition, particularly in respect to working memory, executive control, mind-wandering, inner speech, and the "theater models" of conscious access. Baars, in describing his Global Workspace Theory, similarly uses a classic theater or "spotlight" metaphor for first-person interiority. According to research in this direction, "conscious information processing... is associated with a *distinct internal space* [mind-space], buffered from fast fluctuations in sensory inputs, where information can be shared across a broad variety of processes including evaluation, verbal report, planning and long-term memory" (Dahaene et al., 2006, emphasis and bracketed comment added). Baddeley's theory of working memory (2000) is also compatible with J-consciousness, particularly the claim that the visual-spatial sketchpad, phonological loop and episodic buffer depend on conscious access. Like

contemporary functionalists, Jaynes insists that the executive must be understood as existing purely in a functional sense, structured by embodied experience and analogical reason.

—Gary Williams, “What is it like to be nonconscious? A defense of Julian Jaynes,” *Phenomenology and the Cognitive Sciences*, (2011) 10: 217, pp. 15-17. p. 24-25.

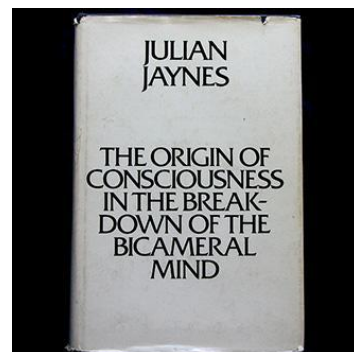
We want to know WHERE IS CONSCIOUSNESS, LITERALLY. If it is real, it must exist. If it exists, it must be HERE, in the body of a man. Let’s cut one open and see what we can see. Um....as expected, this was inconclusive. Sure, science can increasingly see into the working, living brain in an amazing way. We can now pinpoint where synapses fire, where impulses travel, we can see the bundle of nerves that does this or that. But Jaynes points out something I think we instinctively all feel: that physical stuff can never, ‘*not ever*,’ explain consciousness itself. But a lot of us also don’t believe in God. So in conclusion: WTF?

—An irreverent (but effective) [introduction to Jaynes](#)

If Chalmers thought explaining phenomenal consciousness in physicalist terms was “hard,” the same for Jaynesian consciousness, an elaborated species of Blockian access consciousness, is down right impossible. A complete physicalist explanation of the *actual* universe would have not only that to explain but all imaginable universes as well—even those unimaginable to us.

—more below on how we may come to this conclusion

Forty years, it’s been, since Julian Jaynes first published [The Origin of Consciousness in the Breakdown of the Bicameral Mind](#),¹ raising a ruckus at the time. It even made David Bowie’s impressive [list](#) of favorite books. The attention included more skepticism than appreciation from philosophers, however. I bought my copy the instant it came out and devoured it with excitement. Now, having read hundreds of papers and books on literary, scientific, and philosophical topics, you would think I’ve acquired some perspective. But after revisiting Jaynes’ remarkable idea that consciousness, as we know it, is only three thousand or so years old, I find the water still hasn’t totally drained from it. He’s always had [his followers](#). And even though time always complicates theories until it breaks them and my interests have moved sideways from consciousness—its character, origin, and significance, as Jaynes saw them, is still a very live interest. There



¹ Hereinafter referred to as Jaynes, 1976.

is some reason to take him at least as seriously as any alternative account of the subject. I don't think it's too soon to see analogies with Darwin...

The interdisciplinary requirements necessary for fully grasping, let alone, quashing his case are steep and the walls between disciplines seemingly as unbreachable as ever, but Jaynes' theory continues to stir controversy for some historians, archaeologists, linguists, religion scholars, psychologists, neuroscientists, and literary theorists... Current neuroscience seems to be rediscovering Jaynes.

And among philosophers of mind, the early notice was from [Ned Block \(negative\)](#) and [Daniel Dennett \(more cautious\)](#). Recently, a Jaynesian revival seems underway in two papers by [Jan Sleutels \(here\)](#) and [here](#)) and in one by [Gary Williams](#). There is a [short video lecture series by Jans Sleutels](#).

Were zombies in our ancestral tree? Philosophical ones, maybe... That's one interpretation of Jaynes which we will pursue.

...

First, we should get clear about "consciousness." But that's a big chunk of the problem right there. Philosophers aren't settled on exactly what it means or even what it refers to. Even still, *if* it refers. Certainly, it is a settled issue to those few philosophers of mind, psychologists, and neuroscientists who have decided that *it is going to be* this thing rather than that one. But a wide consensus that it is one and not another is still wanting.

Bertrand Russell, for example, early in the last century equated it with perception², by which, it seems, he meant if you are getting sensory input and can behave (act, speak, etc.) in such a way that you give off evidence that you can process the input in some way, then you must be conscious. Surprisingly, that notion still persists. The trouble is, lots of things from smoke detectors to white blood cells³ to houseplants are conscious by that rule.

Nevertheless, some progress has been made in sorting out what consciousness *could* be and what it is better to say it is *not*. Better because we can see our way to getting a better empirical handle on these *other* things and have ready names for them, "perception" being one.

² "We are 'conscious' of anything we perceive." Russell wrote in *Analysis of Mind*, 1921, p. 12. Russell also considers, after perception, *memory* and *belief* as pre-philosophical candidates for the referents of consciousness. Folk psychology rarely gestures seriously at the latter two anymore.

³ Jaynes' own example.

Russell's off the cuff attempt at putting his finger on it is scarcely isolated. Such empirically lame characterizations no doubt led to views like B. F. Skinner's who more or less concluded that consciousness isn't anything at all if it can't be reduced to behavior or dispositions to behavior conditioned by an environment. Skinner's reductive analysis was taken to task by Daniel Dennett, among a host of others, who charged that Skinner never really offered an argument except to suggest in forceful terms that the brute facts were on his side—i.e., that there is no empirical room for consciousness to be anything but a constellation of behaviors when all we ever see or hear of the mental is cashed out in behavior. *So there!*

But whole realms of normative experience, for one, were conveniently left out of Skinner's impatient reduction, including the *force* of reasoning to conclusions that one *should* accept. The *reasoning* required to convince us that consciousness is dispensable is left unexplained by behaviorism. For example, how do brute facts convey *knowledge* at all (“knowledge” as in “information you can stop asking questions about”), let alone start the ball rolling toward a change of attitude and consequent behavior. The felt force of brute facts cannot merely be dispositions to behave or we would have *no reason to recommend* one view of a matter over another. You either feel the force or you don't, what is the point of saying you *should*? Absent some source for the normativity implied in your suggestion that I should believe you, you must be relying on your “scariness quotient.” Absent that, we are entirely above (or below) asking for advice or taking it. As Dennett quips, applying the behaviorist discourse of “operant conditioning,” Skinner's critics must not have found his conclusions “reinforcing.” The best Skinner's theoretical baggage permitted him were gesticulations, even tantrums, not proper arguments, and that left the door open wide for his critics.

Yet—that said about Skinner—even Jaynes admitted, behaviorism *does* get something right. Skinner thought science should not “dehumanize man” but “de-homunculize him.”⁴ Jaynes accepted that nothing appears in conscious action that does not first appear in behavior,⁵ but only after being processed *in a certain way*, and he offered to explain that process...

Consciousness Blocked

⁴ B. F. Skinner, *Beyond Freedom and Dignity* (New York: Bantam Vintage, 1972), pp. 190-191.

⁵ Jaynes, *op. cit.*, p. 66. No stage drama has ever been written or performed about things that have *never* been seen or evoked by things off stage. More about this thaumaturgical picture later when we get to Jaynes' notions of an “analog I” and an inhabitable “mind-space.” Not surprisingly, Jaynes spent some time as an actor.

Let's back up to get a better handle on the relevant concept of consciousness. Ned Block in the mid 1990s⁶ offered what has turned out to be an influential distinction between two types of consciousness, "phenomenal" and "access":

Phenomenal consciousness (which Block later called "phenomenology")

This is the ability to have an *experience* of something, sometimes called a *quale* (*qualia*, pl.) or a "raw feel."⁷ Beings who can have these experiences also have a thing it is like to be.⁸ They have a quale, so to speak, of themselves. An apple tastes *like something* to you. And you tasting an apple may be a singular instance of phenomenal consciousness. A huge amount of debate has gone on about the *neural basis*, if any, and *significance* of such consciousness. Because such experiences are usually accepted as real,⁹ reporting on actual phenomena, and all "real" animal mental phenomena must have a naturalistic—read neurophysiological if not electro-chemical—basis in a non-dualistic philosophic atmosphere, the head scratching has been intense. Surely, there are other "hard problems," but this one has been called "[the hard problem](#)" by David Chalmers. Phenomenal consciousness, we are to assume, is *not a social construct*. It is emanation of, or coincident with, brain hardware. It is physical stuff or a physical property. *Unlike*, a Jaynesian would think, is the case with:

Access consciousness

Which Block explains thus:

A state is access-conscious (A-conscious) if, in virtue of one's having the state, a representation of its content is (1) inferentially promiscuous (Stich 1978), that is, poised for use as a premise in reasoning, (2) poised for rational control of action, and (3) poised for rational control of speech.¹⁰

Information is access conscious if you can do something with it. Shore up an argument, defend intelligent design, choose a mate, infer the presence of unobserved planet, justify a homicide

⁶ Ned Block, "On a Confusion About a Function of Consciousness," *Behavioral and Brain Sciences* (1995) 18:2.

⁷ Presumably "a cooked feel" is the perfectly communicable analog of this. Someone asks how you are, you say, "Fine." That would be cooked to the point of conveying something very far removed from the original semantic elements of the question.

⁸ What it is like to have it—recalling Thomas Nagel's famous query: "What is it like to be a bat?" *The Philosophical Review*, October 1974.

⁹ It's not clear what it would mean *not* to consider them real, other than that people lie when they make such claims: They really experience nothing whatsoever. They are just deceiving themselves or you. About first person qualia reports, how would you know you are *not* deceiving yourself? The possibility of self-deception here seems incoherent.

¹⁰ Block, *op. cit.*, p. 231.

before a crowd of peers, etc. It's pimp-ready. You are access conscious if you can traffic in reasons. This aspect of the mental is what exercised Jaynes' imagination.¹¹ Though, it appears, he had worked out his notion of consciousness long before Block's distinction, it is pretty clear Jaynes considered access consciousness, or something comprehending it, consequentially important, not the merely psycho/physically problematic ideas of phenomenal consciousness. But, as Dennett, Sleutels and Williams have pointed out, Block seems to have missed this entirely in his [early dismissive review of Jaynes' book](#), calling it "preposterous" that our close cousins from before only 3000 years ago were traipsing about like zombies, lacking access consciousness, all the while pulling off mammoth feats of cultural invention. Perhaps Block misjudged how *little* access consciousness it takes to build a civilization.

Them was some very capable bicameral zombies

Let's not underestimate zombies, or "fringe minds"¹² as Sleutels calls them. The fact is, access consciousness may be far less necessary to thriving than many have apparently believed. We may be surrounded by zombies today and may have to look hard to notice. Indeed, the reason things go so well—or badly—in our society is because zombieism is rampant. No, zombies are neither all bad nor all good. They just are. They may not be engines of innovation or be good at getting us out of dire scrapes, but zombies do the hard work of getting things done day to day. Let's not forget that. Those of us stricken with bad cases of access consciousness must contend with this. But we get ahead of ourselves...

Consciousness situated

To situate Julian Jaynes still better, we need a little history of psychology and mind.¹³ For much of the middle part of the 20th Century some form of behaviorism informed thinking about mind both among psychologists and philosophers of mind. Freudianism was anathema to the empiricist/pragmatic bent of American intellectualism. The gold standard here was to explain mental phenomena in terms of natural or physical laws, or, at the very least, observables.

¹¹ It should also go some ways toward explaining the specifically philosophical interest in consciousness. Though fascinating, phenomenal consciousness, qualia, specifically, is probably only philosophically consequential at a pretty high level of normative analysis. Normativity has a characteristic imperative toward refinement. It is pitted against reduction of any sort. "Tell me you are feeling what I am feeling and I'll tell you you have to be mistaken, *simply* in virtue of your presumption," as Bianco Luno says.

¹² ["Fringe Mind Strategies."](#) AVANT, Vol. IV, No. 2/2013. Fringe minds may, of course, also include everything from animal minds, to children's minds, to artificial minds, to certain misabled minds... maybe even most minds!

¹³ The history of psychology was Jaynes' specialty.

Introspection, imagination, metaphor-laden, arm-chair speculation about things not optically or aurally tractable was not scientific.

Time passes, ideas lose their shine. By the late 1960s, the raw behaviorism earlier advanced by Ivan Pavlov, then John B. Watson, and later refined and radicalized by Skinner had nearly run its course. It was under attack by cognitive psychology and philosophers of mind for being dense about what really mattered to most of us about mentality. This attitude was signaled by Daniel Dennett's article called "Skinner Skinned"¹⁴ at about this time. Only two years earlier, Jaynes had come out with his book, *The Origin of Consciousness in the Breakdown of the Bicameral Mind* (1976) with its amazing story about consciousness that seemed to re-center attention on the elusive concept behaviorism had shown itself so ill-suited to explain.

In a 1977 review of the book, philosopher of mind Ned Block (the very same who was to give us the consciousness distinction in 1995), committed to a neural basis for consciousness, found preposterous Jaynes' suggestion that consciousness itself, as opposed to the *concept* of consciousness, could be of only recent historical, not evolutionary, vintage. For Block, consciousness must have been riding on some physiological development, not the punctuated cultural, historical, and linguistic evolution intimated by Jaynes. The leap from non-consciousness to consciousness, as we know it, such a major development in the history of any species, struck thinkers like Block as violating a presupposed *gradual continuity* between "non-conscious" animals and animals like us (a point noted by Dennett early on and Sleutels more recently). Stodgy dinosaurs didn't sprout feathers and take to the skies as birds so fast.

Dennett, a social constructivist about consciousness, saw it as a "software" issue, disagreeing with the Blockian presupposition that consciousness must be a neurological development, continuous with, and surely as slow as, other major evolutionary changes. Jaynes claimed, in essence, that consciousness is primarily a cultural phenomena consequent on largely linguistic sophistication. Counter to Block, the Jaynesian idea is that consciousness is a concept—an extraordinarily enabling one—but not a thing separate from a way of thinking that orients us within experience. Consciousness itself is a concept, not requiring material coordinates in space and time. It emerges as part of a complex network of concepts that mutually interdefine each other. There is no neural substrate specific to consciousness, not anymore than there need be a neural substrate for the concept of a cat, say, a "cat"-concept-inducing constellation of neurons.

Jaynes did speculate about the neurophysiology necessary for consciousness to happen. He thought something in the right brain, an analog of the left brain speech center, was involved.

¹⁴ Daniel C. Dennett, *Brainstorms: Philosophical Essays on Mind and Psychology*. Bradford Books 53-70 (1978).

Early preconscious bicameral zombies heard voices, godlike and authoritative, emanating from somewhere “in their head” or out there but in some non-empirical realm. Maybe their right brains played tricks on them. But whatever the physiological details of all this, he admitted, it was for neuroscience to decide them in due course. The critical point being, the ability for consciousness is not the same as consciousness itself. One may be physiologically able to read but never learn to do it. Literacy is a culturally induced development...

Fast forward 40 years: neuroscientific methods and results unavailable to Jaynes are spurring reassessment of his theory. His claim again is that consciousness is more cultural artifact than any nature-determined capability. Not only that, but Jaynes’ book presented a case for believing that consciousness, at least the particular form of it that interested Jaynes (and further described below), the most intriguing aspect of the mental, emerged 3000 years, give or take a few centuries. It emerged, *not in the time of evolutionary biology but in historical time*, in nearly all human civilizations of any sophistication. It was enabled by sophistication in language and triggered by stress and traumatic events happening in recorded time. Jaynes began the process of documenting the literary and artistic evidence for the emergence. The evidence was tentative but impressive. He would need an interdisciplinary army of scholars and researchers to clinch his case.

To make his theory initially plausible, Jaynes surveyed a large bit of archaeological and literary evidence suggesting that within a relatively short cultural/historical—*not biological*—time frame the kind of narratives our ancestors told themselves and their world underwent a radical transformation. They went from “just so” stories, war reportage, or matter-of-fact depositions to endless psychologically inflected, and convoluted mental dramas. What historians and cultural scholars had seen as striking stylistic developments in the arts, especially that of storytelling, Jaynes saw as a “tell-tale” sign that human mentality had changed in the interim.

Consciousness cornered

To begin to make this story plausible, Jaynes had to sort through the mental repertoire and precisely describe what he took consciousness to be and *not* to be.

Things consciousness is NOT:

- Perception
- Memory

- Intelligence
- Learning
- Judgment
- Reasoning
- Nor, very importantly, is it *located* (in the sense that your head is poised above your neck, or your brain inside your skull, or we on the planet earth, etc. Consciousness does not have GPS coordinates. Indeed, the very idea that anything *has location* is a concoction of consciousness.)

All the things on this list are amenable to empirical investigation—but for the last one. As such they are targets squarely within the range of standard scientific methods. Consciousness, Jaynesian—a richer form of Blockian “access consciousness,” however, seems not to be.

Nor by putting all these things together do we get consciousness. Indeed, to function reasonably well in the natural world, consciousness is not needed. It can even get in the way. Being a cultural artifact, we can live and thrive as any fauna may with little or no modicum of consciousness. If thriving, depending on how “thick” a notion you have of what “thriving” means, is the goal, it is probably best pulled off with as little consciousness as possible.

Not for nothing did thinkers like Skinner consider consciousness superfluous. Skinner did get this much right. We can observe a lot and the sum total of the observable, it seemed to him, would be sufficient to explain, in theory, all there was to know about the mental. A disposition to behave in certain ways is characteristic of entities that we attribute mental properties to. And that, according to Skinner, was adequate explanation for what we need to know about the mental.

Pure Skinnerian behaviorism may have fizzled away, but something of the spirit of it is still very present. Cognitive psychology and then neuroscience might be said to remain essentially behaviorist in that—while no longer focused on the doings of large scale organisms like rats and humans—the attention is now on the *micro-behavior* of cellular and subcellular, even chemical constituents of those macro-behaving entities. There is a lot of closet behaviorism still out there, according to Larry Hauser, author of [IEP article on behaviorism](#). The term “behaviorism” may not be fashionable anymore but the basic attitude that things must be explained by external observation and physical causation is still the reigning tenet.

But philosophers have for a long time been able to conceive of entities with all the standard mental traits on the list above as fully functional and effective agents or beings—*minus*

consciousness. Such beings need not show any tell-tale sign of a consciousness deficiency. These they have called “philosophical zombies” or p-zombies.

The thing is: one cannot go through *the motions* of having consciousness. If you can *go through the motions*, you are conscious... Or you are not. The point is: observing “motions” is not going to sort the conscious from the non-conscious. (We are laboring under the confusion between the type of consciousness that Block thought ancients must have had to have done as well as they did and Jaynesian consciousness, which we will shortly call “consciousness proper.” The latter is a different animal mentality altogether.)

In fact, what would a consciousness disability look like? How would we know a p-zombie if we saw one? For they have all usual mental knacks.¹⁵ Indeed, except for yourself (even then, only perhaps) everyone around you might be a p-zombie for all you know. How can you be sure you are not a p-zombie? Would you think any differently if you were?

In the right circumstances, maybe it would be evident. But those are not *normal* circumstances.

The one thing we have, that a p-zombie doesn’t, is consciousness—*which is what?*

Enter Jaynes. The force of his argument inheres in the claim that the philosophical animal, the p-zombie, *was once a real existent and, in some form, still is*. There are real p-zombies. Once, most of the inhabitants of the planet were p-zombies. They were among our forebears. And, moreover, the time when they dominated the planet was within historic—not prehistoric or evolutionary—times. And, by the way, in some form, (did I say this already?) they are still around.

Culpable vs. capable consciousness

And consciousness is?....

Jaynes painted a functional picture of it. It is not a thing, like, say, a neuron, a constellation of them, a brain, a homunculus, etc., but an activity. It is something like this: it¹⁶ offers commentary, gloss, guidance, perspective, it monitors and passes final verdict on the functions of all the other contents of mind. It posits a *unified* “self,” It creates “a point of view” then

¹⁵ They don’t need to eat brains like the Hollywood type. Maybe they dine on minds? But in an [identity-theorist’s](#) world where mind just is brain, these mind-eaters go eternally hungry....

¹⁶ “It,” if you are wanting further characterization, might be an “*asocial* construct,” neither to be confused with a physical thing, nor with entirely a social one. See the last section for more.

models objects for that view to take in. The raw material is, ultimately, empirical information. But the posited self or analog “I” (as Jaynes termed it) organizes experience in a spatialized forum in such a way as to allow for analysis and hypothesis. In the end, it has no other raw material but what is outside and empirical. But what it then goes on to do with this material is fettered only by its whim or need. It is this whim or need made manifest.

For without the concocted analog “I,” “there is no there there” as Gertrude Stein said of Oakland, California. Zombies are not home. No “home” to be in. They are not ensconced in a place with a *culpable*¹⁷ point of view. There is nothing there for whom anything matters or to whom anything is properly attributable.¹⁸

In its most advanced form, the primary function of consciousness is the demarcation of the boundary between what is within and what is without a center of significance, the self. Consciousness creates a mind space¹⁹ and situates a “self,” a perspective, at its center. It is then in a position to issue reports on how things are inside, at, and beyond this border from this perspective, it being wise for the rest of your mental faculties to attend to these edicts.

Wise, but not necessarily necessary for survival. Thus p-zombies can manage pretty well under *routine* circumstances. The p-zombie or bicameral mind is at the receiving end of edicts whose source it can only gesture at with spatial metaphors: the edicts come as voices from somewhere “deep within” or from “on high” or from “over there.” (Note the spatial metaphors: they have no other way to conceptualize experience but with what their senses tell them everything is ensconced in: *space*.)

But let all hell break loose and a little Jaynesian consciousness might have made our p-zombie’s day. He or she might then have the wherewithal to bypass the voices and deal with routine-challenging trials mano a mano... Look, no voices!

But consciousness, like birth, is rude; it does not come on without trauma. The transition from zombieism to consciousness proper hurts. Not only is it sired by emergencies but its very advent



¹⁷ As opposed to “capable.” Zombies are quite capable. But post-zombie consciousness excels at culpability.

¹⁸ In any sense of “mattering” different than smoke particulates “matter” to a smoke detector. Functionally, yes. Ethically, aesthetically, logically, no.

¹⁹ Note the spatial *metaphor*. Jaynes thought a certain sophistication of language was critical for the space-generating capability of consciousness.

sharpens the severity of the occasion. Ramp up the stress and—if it doesn't lose it altogether, the odd p-zombie—even with only half a mind to and half a mind to work with—will be provoked into developing a knack for imagining itself an “I” and rehearsing or anticipating a possible role in a narrative on a mind stage,²⁰ a place where it may see itself a character in a story with baggage and possible futures that may (or may not) play out. It may develop counterfactual skills, make believe things were different and what might happen then. Notice possibilities and, just maybe, take an initiative. Seize some agency. Draw up an agenda. Rock the boat of the natural order. There will be regret, there will be bittersweet, forever unrequited love, there will be bridges up ahead to worry about falling off of *before* they present themselves... Where before life had been mostly about a “now,” mainly a concern of powers experienced as alien, *now* there is a whole past to be haunted by and a future to fret. Your realm of concern just tripled in size—and you are on your own, baby! *Pretty scary stuff for a zombie.*

Anyway, something like that is what Jaynes thought happened to our ancestors. They invented a head game situated in culture, with a supporting network of concepts to entertain possibilities, made possible, certainly, but not determined, by an evolved neurophysiology, and triggered by the mother of all invention: environmental stress, trauma, an abdication of the “gods,” including, later, the capital “G” one, distanced into abstraction. And perhaps, too, even a little interior boredom... That is Jaynesian consciousness. It is what consciousness is and entails for those afflicted with it.²¹

Consciousness is not protein and carbs, it is dessert. Not even always the cake, often enough merely the icing on it, likely even only a few sprinkles. But some desserts are to die for. Consciousness is a form of over ripeness. Jaynes even suggests it comes fully featured with its own peculiar liabilities. Say what you want about a zombie but they don't suffer much in the way of depression and anxiety.

For short, we may call it *reflective self-awareness* (“awareness” by a “self” for purposes of “reflection”²²). But it is not a species of ordinary awareness, which may more properly be called perception or phenomenal presence. If it is awareness like our awareness of the sounds

²⁰ An “analog I” in a “mind-space,” Jaynes called it.

²¹ The implication for the evolution of religion are also quite clear in Jaynes: there was mental development from immediate animal reactivity, to separation of practical and theoretical abilities, to the modern integration of mind into a player and an imagined play-space—which parallels attitudes toward heterocosmic needs. In the beginning, there was not even the question, then there were questions with distal episodic answers, then just a singular, distal, and abstracted answer forcing us to resort to our own resources for local problems... finally, not even that. The voices have forsaken us, first the many, then the one. The path to being cosmically *alone* was/is messy. We no longer need the gods to lie to us. We do that well enough without help.

²² In the beginning, all quotes were scary. We still quote to cite authority, as though afraid to fully own our pronouncements.

or colors surrounding us, it is so only metaphorically. Angstrom wavelengths of electromagnetic radiation in the upper 400s are experienced, not even remotely like ocean waves. They are experienced as *blue*. But consciousness is only *like* that awareness. It is not that awareness—awareness in the narrower sense of perception. We go astray when we start expecting consciousness to be grounded as perception is in a material world in which we are situated. Exactly what the experience of consciousness is has been thought the crux of a mystery. It's been deemed a mystery because it is by its nature unlike anything else we “know.” But it is the instrument *by which* or *through which* we *are* in the position to “know” anything. How do we know this? *Because we set it up that way.*

If we still perceive mystery about origins, it is because we are stuck looking for a material mechanism or substratum back of it.²³ That is a mistake, as Dennett, for one, avers.²⁴

Again, it is important not to confuse this awareness with more directly present or immediate awareness such as Block's phenomenal consciousness in which no self in any but an autonomic sense is implicated. A smoke detector has perception. It reacts in a functional way to particles of smoke if operating correctly: it makes noise, but we would not say it has consciousness. A white blood cell behaves similarly, to use Jaynes' example. It “knows” what to do when it comes upon an alien infectious cell. It knows like the smoke detector “recognizes” particulates. Or like we know what color the sky is supposed to be on a nice day. But “knowing,” in the sense of data acquisition—whether the subject is a smoke detector, a white blood cell, or a homo sapien—is neither necessary nor sufficient for consciousness.

Again, consciousness is:

Not *memory*. Everything from tree-rings and sedimentary strata to computer storage drives instantiate this.

Not *intelligence*. The processing of information for effective functioning toward a goal is observable everywhere in nature.

Not *learning*. The process of natural selection can mimic learning, albeit in slow motion. And computers can crank it up to lightning speed.

²³ See Appendix on “cat consciousness.”

²⁴ Though he finds a lot untoward speculation in Jaynes, when it came to the latter's core notion, that consciousness might be the mother of all social constructs, Dennett said he had been on the verge of the same thought before ever reading Jaynes. (See Veronique Greenwood's piece in Resources below.)

Not *judgment*. At least in the form of bivalent decision-making, whether to be or not to be, do or not do, mix or not mix, etc... even molecular processes evince gads of this. Oil evinces a “choice” not to mix with water.

Not *reasoning*. If reduced to following logical rules, again nature offers interpretable examples of reasoning and computers can excel at it. Computers can’t program themselves, you say? Ah, but they can in a relevant sense. And if you have in mind some other sense *exclusive to us*, didn’t nature “program” us. We certainly didn’t. Skinner was not totally crazy. He may well have got this part right. *There is plenty out there to shape the tools we use to shape our behavior into what it is.*

Is it some combination of the above? If it is, it should be tractable by standard scientific methods.

However, something else it is critically not, Jaynes noticed, is *location-based*. Does consciousness have GPS coordinates that are a meaningful part of its description? Is it located *in the head*, the brain specifically? Does it matter to the content of a thought that it correlates to one specifiable sector of the brain? The heart could not perform its essential function if it were located in our feet or in an appendage. Its location seems central to its function. Similarly for every other organ or part of our body. The *brain* may be no exception. But the *self-aware mind*? My awareness that I exist—does it *have* to be in some space and time to be at all? —the awareness, not the body, that instantiates it, which obviously has a location in time and space that is essential to its description.²⁵

This last question poses a problem for attempts at scientific explanation.²⁶ How are scientific methods going to handle something to which coordinates in space and time are not relevant? Two natural responses are:

1. that such a thing does not exist or,

²⁵ Consciousness: “It is not to be confused with reactivity. It is not involved in hosts of perceptual phenomena. It is not involved in the performance of skills and often hinders their execution. It need not be involved in speaking, writing, listening, or reading. It does not copy down experience, as most people think. Consciousness is not at all involved in signal learning, and need not be involved in the learning of skills or solutions, which can go on without any consciousness whatsoever. It is not necessary for making judgments or in simple thinking. It is not the seat of reason, and indeed some of the most difficult instances of creative reasoning go on without any attending consciousness. And it has no location except an imaginary one!” (Jaynes, 1976, pp. 46-47) *Far from having location, consciousness is very much in the business of creating it!* It creates the container for its content.

²⁶ It might be suggested that consciousness surely is located in the brain: when we die, consciousness goes to! Think zombies. They don’t need consciousness. The thing is, even when the brain is very much alive and sometimes visited by consciousness, it is a *visit*—consciousness does not *live* there. It is fond of vacations. And if one day it doesn’t return from one, well, it was never very loyal.

2. if it does, it does not matter.

But both responses come very close to merging in their upshot. A declaration of its non-existence usually goes together with an exceptionless materialism. The idea that it doesn't matter, also does. What doesn't exist can hardly matter. Right?

But few thinkers want to give up so easily...

William's three types of mentality

Gary Williams,²⁷ a philosopher with a background in psychology and neuroscience, building on Jaynes, offers this typology of mentality:

1. Non-conscious reactivity

All lifeforms have this²⁸: these are described as “autonomous, self-organizing, dynamic systems.”

2. The bicameral mind

“[S]ymbolic cognition, judgment, pragmatic reasoning, problem solving, planning, etc.” This mentality captures Block's phenomenal, “what-it-is-likeness” experience but not “access” consciousness. “Its concepts are nonconscious and largely extensional, that is, cashed out in terms of concrete, bodily reactivity amongst worldly opportunities for action.” Somnambulism, “zoning out,” athletic “flow,” meditation, playing piano, and hypnotic trance would be illustrations. (Doing the zombie thing, too.)

3. J-consciousness: modern consciousness proper

²⁷ The typology quotations are from “What is it like to be nonconscious? A defense of Julian Jaynes,” *Phenomenology and the Cognitive Sciences*, (2011) 10: 217, pp. 15-17. Russellian perception, as a type of mentality, not consciousness, would fit the first type.

²⁸ Note that saying “all life forms have it” does not exclude some non-life forms having it, too. And you don't have to go so far as a panpsychist. Panpsychism may be correct about some form of mental phenomenology. But it seems quite incoherent to suggest a *pan-consciousness* in anything like the Jaynesian sense. God forbid that the universe, in addition to all its unimaginably violent “bangs” and “implosions,” must also suffer from depression and anxiety.

“...the third and most advanced form of mentality is modern human consciousness, capable of J-consciousness, for Jaynesian consciousness. J-consciousness is hypothesized to be built ‘on top of’ or ‘out of’ the underlying neurological substrate of the bicameral mind.”

Jaynesian consciousness is consciousness with only imagination as a limit to what it may take as its object. It implies a fully autonomous subject, mere phenomenal consciousness does not. There is not only something it is like to be one of these consciousnesses, but this—the what-it-is-likeness of phenomenal consciousness—is itself manipulable by a socially constructed, culturally inflected (because linguistically sophisticated), but undetermined unifying “self.” This self is an analog of a physical self: an “I” free to locate itself at will in a “mind-space,” free to manipulate other selves and conceptual furniture in that mind-space in order to reenact past events for analysis as well to entertain hypothetical scenarios. This mind-space is metaphor driven. Metaphors and their associations are the tools of manipulation. The central metaphor is the idea of a “space,” *like* physical space, but not physical space, *in which* events may happen *like* physical events without being physical events. They happen at the behest of an agent, *like* an object, but not an object, rather, a subject which can not only inhabit this *imagined* “space” yet within this space have full executive control.

A figment of the imagination

A neurological substrate *may* be a necessary condition for J-consciousness. Jaynes himself speculated a bit on what physical substrates were involved (e.g., the right brain analogs of the left brain speech centers were forced to communicate to the left via “voices,” etc.). This part of his thinking was, of course, subject to subsequent research. The results have been mixed. But the critical insight is that, whatever empirically tractable correlates of the conditions that make consciousness possible, their presence is not sufficient for consciousness proper because that is not “where” modern consciousness happens. Consciousness is the quintessential figment of the imagination...

(If then we were not curious about what the “imagination” is, we might *now* be enlightened. But we *are*... Imagination has an enormity of its own. We leave it as a topic for another occasion.)

If Chalmers thought explaining phenomenal consciousness in physicalist terms was “hard,” the same for Jaynesian consciousness, an elaborated species of Blockian “access” consciousness, is downright impossible. A complete physicalist explanation of the *actual*

universe would have not only that to explain but all imaginable universes as well—even those unimaginable to us.

...

How wonderful a thing can consciousness be given that it seems so essential and gratuitous at the same time?

More Resources

Jan Sleutels' [lectures](#) on Greek Zombies.

Gary Williams [defends](#) Antonio Damasio and Julian Jaynes against Ned Block and Alison Gopnik.

Veronique Greenwood, "[Consciousness Began When the Gods Stopped Speaking](#)," offers a nice overview with interesting biographical information on Jaynes.

Peter Carruthers, in "[The evolution of consciousness](#)," makes no reference to Jaynes. He is occupied with telling an evolutionary story about specifically Blockian *phenomenal* consciousness and doesn't seem to find *access* consciousness quite as much in need of physicalist explanation—for some reason.

Appendices

1. "[Consciousness moment](#)" cat and [zombie cat](#)



Bicameral/zombie



Jaynesian "consciousness moment"

The [Jaynesian cat](#) arrives at the cusp of consciousness, then seems to transcend it: evidence that not only might the invitation to consciousness that a mirror affords be traumatic but, if not abruptly skirted, there may be exposure to full-on Jaynesian consciousness with all the attendant liabilities, including susceptibility to vanity, narcissism, depression and anxiety. But this cat is sufficiently astute to quickly surmise it is out of its depth—just in time to avoid capture in a clueless, zombie-like, recursive, nightmare reflex—like [Zombie cat](#). Zombie cat just doesn't get it. The voices in its head are at a loss and its analog "I" too poorly situated to drive from the front seat.

2. Philosophical zombies

"According to physicalism, physical facts determine all other facts. Since any fact other than that of consciousness may be held to be the same for a p-zombie and a normal conscious human, it follows that physicalism must hold that p-zombies are either not possible or are the same as normal humans." Source: https://en.wikipedia.org/wiki/Philosophical_zombie

Chalmers did not think that p-zombies are naturally possible but their metaphysical possibility suggested to him some form of anti-physicalism.

But Jaynes suggested that normal humans developed from p-zombie-like beings. Once it was normal to be a zombie, albeit a zombie who sometimes heard voices in their head. These psychiatrically disordered zombies are distant descendants. And they, or their raggedy remnants, can still appear among us.

~Victor Muñoz
November 2016
Seattle

the \mathcal{P} hilosophy club

